



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,978	10/29/2003	Edmund O. Schweitzer III		8010
7590	03/09/2006		EXAMINER	
Cook Alex McFarron Manzo Cummings & Mehler, LTD. 200 West Adams Street Suite 2850 Chicago, IL 60606			THOMAS, LUCY M	
			ART UNIT	PAPER NUMBER
			2836	

DATE MAILED: 03/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/695,978 Examiner Lucy Thomas	SCHWEITZER ET AL. Art Unit 2836

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 28 December 2005.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-3 and 5-19 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-3, 5-19 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    - a) All    b) Some \* c) None of:
      1. Certified copies of the priority documents have been received.
      2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
      3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                     | Paper No(s)/Mail Date. _____ .  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____ .                                  |

## **DETAILED ACTION**

### ***Drawings***

1. Applicant's proposed amendments to Drawings and Specification are not acceptable and will not be permitted, as the addition of these materials constitutes new matter.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 8-19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-2, and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Guzman-Casillas et al. (US 6,028,754). Regarding Claim 1, Guzman-Casillas discloses a system (Figures 6 and 9) for improving the performance of a distance type protective relay for power systems, wherein, the relay includes a calculation circuit responsive to voltage and current values from the power line to produce a quantity (m value) analogous to the distance between the relay and a fault on the power line, wherein the quantity is applied to a distance element for comparison of said quantity with a setting reach value for a selected zone of a protection (Column 2, lines 17-35, Column 8, lines 15-36), the system comprising: a filter circuit responsive to said quantity for filtering said quantity before the quantity is applied to the distance element, resulting in the noise attenuation of the quantity (Column 8, lines 4-14); and a control circuit for controlling the application of the filtered quantity to the distance element such that the filtered quantity is applied only when said quantity is above a preselected first threshold value and below a preselected second threshold value (Column 9, lines 61-67, Column 10, lines 1-9, 60-63, Column 11, lines 1-9).

The reference teaches a preselected second threshold value, and the timing function as indicated by element 66 performs a filtering function for noise attenuation (Column 8, lines 1-4) that meets the claim limitation because the claim is not specifying a particular filter configuration.

Regarding Claim 2, Guzman-Casillas et al. discloses the said system, wherein the preselected first threshold is a selected percentage of the setting reach value (Column 10, lines 10-15).

Regarding Claim 6, Guzman-Casillas et al. discloses a system wherein, said quantity is a high value, significantly higher than said setting reach value, when there is no fault on the power line, and wherein the system includes a circuit for precharging the filter to the preselected second threshold value when said quantity decreases to the preselected second threshold value from said high value, in response to fault (Figure 9, Column 10, lines 60-63, Column 11, lines 1-9).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 3, 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guzman-Casillas et al. (US 6,028,754). Regarding Claim 3, the recited limitations are not considered inventive because the threshold is typically set based on the tolerance for error, which would result in 100% minus the error plus a safety margin as recited by the Claim. The claims specify a safety margin of 5% and Claim 5 further specifies an error of 8%. However, it has been decided that where the prior art disclose the general condition of a claim, it is not inventive to discover the optimum or workable ranges by routine experimentation. *In re Aller*, 220 F.2d 454, 456 105 USPQ 233, 235 (CCPA 1955).

Regarding Claim 7, the reference does not disclose a specific value for the threshold. However, it would have been obvious that the threshold value may be set o

approximately four times the setting reach value as recited in Claim 7. It has been decided that where the prior art disclose the general condition of a claim, it is not inventive to discover the optimum or workable ranges by routine experimentation. *In re Aller*, 220 F.2d 454, 456 105 USPQ 233, 235 (CCPA 1955).

***Response to Arguments***

8. Applicant's arguments filed on 12/28/2005 have been fully considered.

The reference teaches a preselected second threshold value, and the timing function as indicated by element 66 performs a filtering function for noise attenuation (Column 8, lines 1-4) signal that meets the claim limitation because the claim is not specifying a particular filter configuration, and therefore the reference meets the limitations of the amended Claim 1. The timer taught by the reference provides the delay and the delay is configured with the filter to obtain a smoothing or noise reduction of the signal.

Applicant states that the reference uses a questionable secondary signals from a CCTV that do not properly follow their corresponding input voltage, upon which the decision of whether to issue a trip signal is based. However, the reference discloses that the secondary signals are dependant upon a corresponding input voltage (Column 1, lines 41-48). The distance type protective relay of the reference has the capability to disable the delay/smoothness determination for transients, if the particular delay does not involve the use of CCVTs. For applications involving CCVTs and hence transient responses voltage and current measurements are used for m calculation (see current and voltage inputs to comparators 50, 56, 40, 44 of Figure 6).

Regarding Applicant's statement that the reference does not refer to the noise attenuation provided by the filter, the timing function as indicated by element 66 performs a filtering function for noise attenuation (Column 8, lines 1-4).

***Conclusion***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lucy Thomas whose telephone number is 571-272-6002. The examiner can normally be reached on Monday - Friday 8:00 AM - 4:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on 571-272-2058. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2836

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LT  
March 01, 2006



PHUONG T. VU  
PRIMARY EXAMINER